

What is claimed is:

1. A shut down unit for use with an electro-pneumatic controller,
comprising:

an electronic switch configured to receive a first signal from a control unit of the electro-pneumatic controller and to convey the first signal to an electro-pneumatic transducer of the electro-pneumatic controller, wherein the electronic switch is further configured to receive a second signal associated with a control signal input and to cause the electronic switch to prevent the conveyance of the first signal to the electro-pneumatic transducer.
2. A shut down unit as defined in claim 1, wherein the electronic switch includes one of a transistor and a relay.
3. A shut down unit as defined in claim 2, wherein the transistor includes a gate terminal that is responsive to the second signal.
4. A shut down unit as defined in claim 1, further comprising a comparator configured to compare the second signal to a reference voltage and to prevent the conveyance of the first signal to the electro-pneumatic transducer based on the comparison.

5. An electro-pneumatic controller, comprising:
an electro-pneumatic transducer; and
a shut down unit operatively coupled to the electro-pneumatic transducer and configured to respond to a signal received by the electro-pneumatic controller and to cause the electro-pneumatic transducer to provide a pressure output associated with a shut-down condition when the magnitude of the signal crosses a threshold value.
6. An electro-pneumatic controller as defined in claim 5, wherein the shut down unit includes a comparator configured to compare the signal received by the electro-pneumatic controller to the threshold value and based on the comparison vary a condition of the shut down unit to cause the electro-pneumatic transducer to provide the pressure output associated with the shut-down condition.
7. An electro-pneumatic controller as defined in claim 5, wherein the shut down unit includes a switch configured to respond to the signal provided to the electro-pneumatic controller to cause the electro-pneumatic controller to provide the output pressure associated with the shut-down condition.
8. An electro-pneumatic controller as defined in claim 7, wherein the switch includes one of a transistor and a relay.
9. An electro-pneumatic controller as defined in claim 5, further comprising a selector configured to selectively enable the operation of the shut down unit.
10. An electro-pneumatic controller as defined in claim 9, wherein the selector includes a manually actuated switch.

11. An electro-pneumatic controller, comprising:
a control unit;
a shut down unit communicatively coupled to the control unit; and
an electro-pneumatic transducer communicatively coupled to the shut down unit, wherein the shut down unit is configured to cause an output pressure of the electro-pneumatic transducer to be at a pressure associated with a shut-down condition in response to a value of a control signal received by the electro-pneumatic controller.
12. An electro-pneumatic controller as defined in claim 11, wherein the shut down unit includes a comparator and an electronic switch operatively coupled to the comparator.
13. An electro-pneumatic controller as defined in claim 12, wherein the electronic switch includes one of a transistor and a relay.
14. An electro-pneumatic controller as defined in claim 11, further comprising a shut down selector operatively coupled to the shut down unit and configured to selectively enable the operation of the shut down unit.

15. A method of shutting down a pneumatically actuated device, comprising:
- comparing a control signal received by an electro-pneumatic controller to a predetermined value;
 - interrupting a signal provided by a control unit of the electro-pneumatic controller to an electro-pneumatic transducer;
 - changing an output pressure provided by the electro-pneumatic controller in response to interruption of the signal to cause the shut down of the pneumatically actuated device.
16. A method as defined in claim 15, wherein interrupting the signal provided by the control unit to the electro-pneumatic transducer includes opening an electrical path between the control unit and the electro-pneumatic transducer.
17. A method as defined in claim 15, wherein interrupting the signal provided by the control unit to the electro-pneumatic transducer includes interrupting the signal only if a shut down selector has been set to an enabling condition.
18. A method as defined in claim 15, wherein changing the output pressure provided by the electro-pneumatic controller includes reducing the output pressure to a substantially zero pressure.
19. A method as defined in claim 15, wherein the pneumatically actuated device includes one of a valve and a damper.